

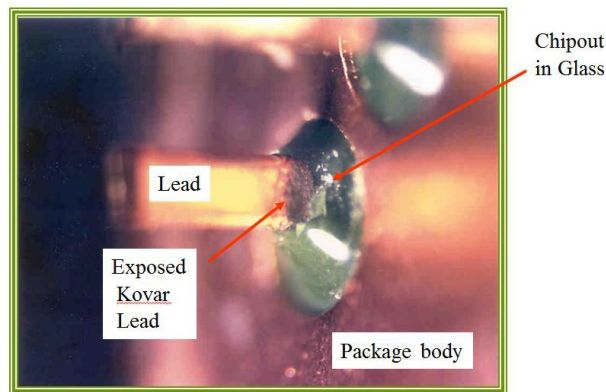
Virtual Training Course Outline

External Visual Inspection per Mil-Std-883 TM 2009

(1 Session)

Instructor: Thomas Green, [TJ Green Associates, LLC](http://www.tjgreenllc.com), tgreen@tjgreenllc.com

REJECT Chipouts in Glass to Metal Seals



Reject.. A significant chipout in the glass to metal seal which exposes the base Kovar metal on the lead.

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This course covers the visual inspection criteria for hermetic packaged microelectronic devices and similar devices and a review of typical plastic package defects in accordance with best commercial practices. Color photographs of actual production defects are reviewed and discussed in detail. The students are exposed to a variety of defects and the instructor explains why the defects are critical to the reliability of the end product.

- ✓ Understand what to look for as part of external visual inspection Mil-STD-883 TM 2009
- ✓ Learn how to interpret and apply inspection criteria in JEDEC STD 9C

Course Outline

- Weld and Seal defects
- Glass and ceramic feedthrough defects e.g. meniscus cracking Package marking and pin/lead defects
- Inspection Criteria for Microelectronic Packages and Covers Foreign Material Identification and Contamination Control
- Review applicable criteria in JESD 9C
- Plastic Package Defects

- Summary and Review Q&A Session
- Student Feedback and Course Critique

INSTRUCTOR BIO



Thomas J. Green has more than 38 years combined experience in industry/academia and the Department of Defense, including years developing curriculum and teaching industry professionals about microelectronics assembly-related packaging and processes. Serving as a Research Scientist at the U.S. Air Force Rome Air Development Center, Tom worked as a reliability engineer analyzing component failures from fielded avionic equipment. As a Senior Process Engineer with Lockheed Martin Astronautics in Denver, Tom was responsible for materials and processes used to assemble hybrid microelectronic components for military and aerospace applications. While with Lockheed, he gained invaluable experience in wirebond, die attach, thick- and thin-film substrate fabrication, hermetic sealing, and leak test processes. For the last 15 years, Tom's expertise has helped position his company as a recognized industry leader in teaching and consulting services for high-reliability military, space, and medical device applications. Tom is a Fellow of IMAPS (International Microelectronics and Packaging Society).